\$2,000,000 for fiscal year 1989, \$20,000,000 for fiscal year 1990, \$25,000,000 for fiscal year 1991, \$17,968,000 for fiscal year 1992, and \$18,091,000 for each of the fiscal years 1993 through 1997, to be derived from sums authorized under section 13451(e) of title 42.

- (2) Funds previously appropriated for the steel research and development initiative—
  - (A) under title II of the Interior and Related Agencies portion of the joint resolution entitled "Joint Resolution making further continuing appropriations for the fiscal year 1986, and for other purposes", approved December 19, 1985 (Public Law 99–190); or
    - (B) under subsequent appropriation Acts,

which remain available under the terms of such Acts may be used for the purposes of this chapter.

## (b) To Institute

There are authorized to be appropriated to the Director of the National Institute of Standards and Technology to carry out the functions of the Institute under this chapter, \$3,000,000 for each of the fiscal years 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, and 1997, to be derived from sums otherwise authorized to be appropriated to the Institute.

(Pub. L. 100–680, §9, Nov. 17, 1988, 102 Stat. 4076; Pub. L. 102–486, title XXI, §2106(a)(3), (4), Oct. 24, 1992, 106 Stat. 3070.)

#### References in Text

Title II of the Interior and Related Agencies portion of the joint resolution entitled "Joint Resolution making further continuing appropriations for the fiscal year 1986, and for other purposes", approved December 19, 1985 (Public Law 99–190), referred to in subsec. (a)(2)(A), is Pub. L. 99–190, §101(d) [title II], Dec. 19, 1985, 99 Stat. 1224, 1244. The provisions relating to steel research and development are not classified to the Code.

#### AMENDMENTS

1992-Subsec. (a)(1). Pub. L.  $102-486,\ \S 2106(3),$  substituted "\$25,000,000 for fiscal year 1991, \$17,968,000 for fiscal year 1992, and \$18,091,000 for each of the fiscal years 1993 through 1997, to be derived from sums authorized under section 13451(e) of title 42" for "and \$25,000,000 for fiscal year 1991".

Subsec. (b). Pub. L. 102-486, §2106(4), substituted "1991, 1992, 1993, 1994, 1995, 1996, and 1997, to be derived from sums otherwise authorized to be appropriated to the Institute" for "and 1991".

# § 5109. Relation of existing program

Proposals received by the Department of Energy before November 17, 1988, may be carried out without regard to changes in the management plan and research plan required by this chapter.

(Pub. L. 100-680, §10, Nov. 17, 1988, 102 Stat. 4076.)

## §5110. Drug-free workplace

(a) No department, agency, or instrumentality of the United States receiving funds authorized to be appropriated under this chapter for fiscal year 1989, fiscal year 1990, fiscal year 1991, fiscal year 1992, fiscal year 1993, fiscal year 1994, fiscal year 1995, fiscal year 1996, and fiscal year 1997, or under any other Act authorizing appropriations for fiscal year 1989, fiscal year 1990, fiscal year

1991, fiscal year 1992, fiscal year 1993, fiscal year 1994, fiscal year 1995, fiscal year 1996, and fiscal year 1997, shall obligate or spend any such funds, unless such department, agency, or instrumentality has in place, and will continue to administer in good faith, a written policy designed to ensure that all of its work places are free from the illegal use, possession, or distribution of controlled substances (as defined in the Controlled Substances Act [21 U.S.C. 801 et seq.]) by the officers and employees of such department, agency, or instrumentality.

(b) No funds so authorized to be appropriated to any such department, agency, or instrumentality shall be available for payment in connection with any grant, contract, or other agreement, unless the recipient of such grant, contract, or party to such agreement, as the case may be, has in place and will continue to administer in good faith a written policy, adopted by such recipient, contractor, or party's board of directors or other governing authority, satisfactory to the head of the department, agency, or instrumentality making such payment, designed to ensure that all of the workplace of such recipient, contractor, or party are free from the illegal use, possession, or distribution of controlled substances (as defined in the Controlled Substances Act [21 U.S.C. 801 et seq.]) by the officers and employees of such recipient, contractor, or party.

(Pub. L. 100–680, §11, Nov. 17, 1988, 102 Stat. 4077; Pub. L. 102–486, title XXI, §2106(a)(5), Oct. 24, 1992, 106 Stat. 3070.)

#### REFERENCES IN TEXT

The Controlled Substances Act, referred to in text, is title II of Pub. L. 91–513, Oct. 27, 1970, 84 Stat. 1242, as amended, which is classified principally to subchapter I (§801 et seq.) of chapter 13 of Title 21, Food and Drugs. For complete classification of this Act to the Code, see Short Title note set out under section 801 of Title 21 and Tables.

### AMENDMENTS

1992—Subsec. (a). Pub. L. 102–486 substituted "fiscal year 1991, fiscal year 1992, fiscal year 1993, fiscal year 1994, fiscal year 1995, fiscal year 1996, and fiscal year 1997" for "or fiscal year 1991" in two places.

## EFFECTIVE DATE

For provision that the provisions of Pub. L. 100-680 relating to a drug-free workplace shall not be effective until Jan. 16, 1989, see section 215(c) of Pub. L. 100-685, set out as a Drug-Free Workplace note under section 2459 of Title 42, The Public Health and Welfare.

# CHAPTER 78—SUPERCONDUCTIVITY AND COMPETITIVENESS

5201. Findings and purposes.

Sec.

(a) Findings.

(b) Purposes.

5202. National Action Plan on Advanced Superconductivity Research and Development.

- (a) Establishment.
- (b) Content and scope.
- (c) Action Plan report.
- (d) Update reports.

5203. Department of Energy.

5204. National Institute of Standards and Technology.

5205. National Science Foundation.

Sec.

5206. National Aeronautics and Space Administration.

5207. Department of Defense.

- (a) Focus of research.(b) Additional activities.
- (c) Defense Advanced Research Projects Agency.

5208. International cooperation. 5209. Technology transfer.

- (a) Promotion.
- (b) Impediments to commercialization.

#### § 5201. Findings and purposes

#### (a) Findings

The Congress finds that—

- (1) recent discoveries of high-temperature superconducting materials could result in significant new applications of these materials in such areas as microelectronics, computers, power systems, transportation, medical imaging, and nuclear fusion, yet most potential applications may well lie beyond our ability to predict them;
- (2) full application of the new superconductors is expected to require 10 to 20 years, thus calling for long-term commitments by the public and private sector to appropriate research and development programs;
- (3) the Nation's economic competitiveness and strategic well-being depend greatly on the development and application of critical advanced technologies such as those anticipated to evolve from the new superconducting materials:
- (4) the United States manufacturing industries confront strong competition in both domestic and world markets as other countries are increasingly taking advantage of modern technology and production techniques and innovative management focused on quality;
- (5) whereas we have as a Nation been highly successful in the conduct of basic research in a variety of scientific areas, including superconductivity, other nations have been highly successful in the commercial and military application of the results of such fundamental research:
- (6) if the United States is to begin its competitive advantage, it must commit sufficient long-term resources to solving processing and manufacturing problems in parallel with basic research and development;
- (7) Federal agencies have responded aggressively to this exciting challenge by reprogramming funds to basic superconductivity research while informally coordinating their efforts to avoid unnecessary duplication; and further commitment of Federal funding and efforts directed to developing manufacturing, materials processing, and fabrication technologies is essential so that these activities may be conducted in parallel;
- (8) successful development and application of the new superconducting materials will require close collaboration between the Federal Government and the industrial and academic components of the private sector, as well as coordinating among the Federal departments and agencies involved in research and development on superconductors;
- (9) a committed Federal program effort with appropriate long-term goals, priorities, and

- adequate resources is necessary for the rapid development and application of the new superconducting materials; and
- (10) a national program should serve as a test of new agency authorities directed at technological competitiveness such as those provided to the Department of Energy.

## (b) Purposes

The purposes of this chapter are-

- (1) to establish a 5-year national action plan to research and develop new high-temperature superconducting materials with appropriate goals and priorities: <sup>1</sup>
- (2) to designate the appropriate roles, mechanisms, and responsibilities of various Federal departments and agencies in implementing such a national research and development action plan.

(Pub. L. 100–697, §2, Nov. 19, 1988, 102 Stat. 4613.)

#### SHORT TITLE

Section 1 of Pub. L. 100-697 provided that: "This Act [enacting this chapter] may be cited as the 'National Superconductivity and Competitiveness Act of 1988'."

### § 5202. National Action Plan on Advanced Superconductivity Research and Development

#### (a) Establishment

- (1) The Director of the Office of Science and Technology Policy shall establish a 5-year National Action Plan on Advanced Superconductivity Research and Development (hereinafter in this chapter referred to as the "Superconductivity Action Plan").
- (2) The Office of Science and Technology Policy shall coordinate the development of the Superconductivity Action Plan and any recommendations required by this chapter with the National Critical Materials Council and the National Commission on Superconductivity.

# (b) Content and scope

The Superconductivity Action Plan shall include—

- (1) goals and priorities for advanced superconductivity research and development to be carried out by individual departments and agencies and organizational elements therein;
- (2) the assignment of responsibility for the conduct of advanced superconductivity research and development among the departments, agencies, and organization elements therein:
- (3) recommendation of proposed funding levels for activities relating to superconductivity of the 5 years following November 19, 1988, for each of the participating departments, agencies, and organizational elements therein; and
- (4) proposals for the participation by industry and academia in the planning and implementation of the Superconductivity Action Plan.

#### (c) Action Plan report

The Office of Science and Technology Policy, in conjunction with the National Critical Materials Council, shall submit a report detailing the Superconductivity Action Plan to the Commit-

<sup>&</sup>lt;sup>1</sup>So in original. Probably should be followed by "and".